

What is claimed is:

1. A light shielding structure of a retractable lens barrel including a lens system, a position of said lens system changing between a ready-to-photograph position and a retracted position, said light shielding structure comprising:

a lens frame to which a lens group of said lens system is fixed, a position of said lens group in an optical axis direction being adjusted during assembly;

10 at least one movable annular member into which said lens frame is screw-engaged, said movable annular member being movable along said optical axis;

a light shield member which prevents harmful light rays from entering said lens system, said light shield member being supported by said movable annular member to be movable along said optical axis relative to said movable annular member, while restricting a rearward movement limit of said light shield member relative to said movable annular member; and

20 a biasing member which is positioned between said light shield member and said lens frame in a compressed fashion to bias said light shield member toward the rearward movement limit thereof relative to said movable annular member.

25 2. The light shielding structure according to

claim 1, wherein said lens system comprises a zoom lens optical system which changes a focal length during a zooming operation,

wherein said movable annular member comprises:

5 a moving ring which is moved along said optical axis by a cam mechanism in accordance with said zooming operation; and

an intermediate ring into which said lens frame is screw-engaged, said intermediate ring being supported  
10 by said moving ring to be movable along said optical axis relative to said moving ring, a forward movement limit of said intermediate ring being restricted relative to said moving ring, and

wherein said light shielding structure includes  
15 a second biasing member for continuously biasing said intermediate ring forward.

3. The light shielding structure according to claim 1, wherein said lens group that is fixed to said lens frame serves as a power-varying lens group of said  
20 lens system which is moved to vary a focal length.

4. The light shielding structure according to claim 2, wherein a male screw thread formed on an outer peripheral surface of said lens frame is engaged with a female screw thread formed on an inner peripheral  
25 surface of said intermediate ring.

5. The light shielding structure according to claim 2, wherein said intermediate ring is linearly guided along said optical axis without rotating relative to said moving ring.

5 6. The light shielding structure according to claim 1, wherein said biasing member comprises a compression coil spring.

7. The light shielding structure according to claim 2, wherein said second biasing member comprises  
10 a compression coil spring.

8. The light shielding structure according to claim 1, wherein said light shield member comprises:  
a ring portion positioned around said optical axis; and

15 a plurality of leg portions which extend forward from said ring portion so that front ends of said plurality of leg portions are engaged with said intermediate ring.

9. The light shielding structure according to  
20 claim 1, wherein said lens group is positioned behind a frontmost lens group of said lens system.

10. The light shielding structure according to claim 2, wherein said cam mechanism comprises:

a cam ring which is positioned around said moving  
25 ring to be rotatable relative to said moving ring, and

includes a plurality of inner cam grooves formed on an inner peripheral surface of said cam ring; and

a plurality of cam followers which project radially outwards from said moving ring to be engaged in said plurality of inner cam grooves, respectively.

11. The light shielding structure according to claim 1, wherein said retractable lens barrel comprises a linear guide mechanism, positioned between said moving ring and said intermediate ring, for guiding said intermediate ring linearly along said optical axis without rotating said intermediate ring relative to said moving ring.